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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,048	12/10/2003	Hirofumi Okada	27,470 USA	8452

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EXAMINER	
HUNNINGS, TRAVIS R	
ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,048	OKADA, HIROFUMI	
	Examiner	Art Unit	
	Travis R Hunnings	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7-11* is/are allowed.

6)☒ Claim(s) *1-4,6 and 12-17* is/are rejected.

7)☒ Claim(s) *5 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: element 13 in figure 1. In figure 12, element 6 should be renumbered as element 61 to comply with the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 7 is objected to because of the following informalities: the text in claim 7, lines 4 and 5 on page 29 reads as follows: "the key retainer is not retained in the mechanical key" It is the examiner's understanding that the key retainer retains the

mechanical key and not vice-versa as suggested by the claim language quoted herein. The claim will be treated on its merits according to examiner's interpretation. The claim language should be amended to reflect this. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Walter (US Patent 6;275,141).

Regarding claim 15, Walter discloses *Single-Key Security System* that has the following claimed limitations:

The claimed security system comprising a lock is met by the door lock of the vehicle (col10 1-32);

The claimed mechanical key for mechanically opening and closing the lock is met by the mechanical key as seen in figure 2;

The claimed portable device including a wireless key that performs wireless communication and includes a key retainer for retaining the mechanical key is met by the remote control performing the operations of opening and closing the vehicle door

wirelessly that contains a receptor for holding the mechanical key as seen in figure 2 (col10 1-32);

The claimed lock controller for opening and closing the lock when wireless communication with the wireless key is established is met by the security system opening the vehicle door when the user activates a door open button on the remote control to wirelessly open the vehicle door (col10 1-46);

The claimed sensor arranged in the wireless key to detect whether the mechanical key is retained in the retainer is met by the spring electrodes that sense whether the key is retained in the receptor (col11 29-44);

The claimed notifying device for notifying a person carrying the portable device that the mechanical key is being retained in the key retainer is met by the LEDs that show what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (col10 49-67).

Regarding claim 16, Walter discloses all of the claimed limitations. The claimed security system wherein the notifying device is one of or a combination of a light that is illuminated, a buzzer that emits a warning sound, and a vibration device that vibrates the portable device when the mechanical key is not retained in the key retainer of the portable device is met by the LEDs lighting up to indicate what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode

when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (col10 49-67).

Regarding claim 17, Walter discloses all of the claimed limitations. The claimed security system wherein the lock is a door lock of a vehicle, the lock controller is installed in the vehicle and the notifying device includes a light that is arranged in the vehicle and activated when the mechanical key is not retained in the key retainer is met by the door lock of the vehicle being controlled by the security system of the vehicle and the vehicle having mode indicators in the vehicle cabin that are illuminated when the vehicle is placed into valet mode by removing the key from the remote control receptor therefore displaying to the user that the key is not being retained in the receptor (col10 1-46).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Ruediger (US Patent 6,731,196).

Regarding claim 1, Walter discloses the following claimed limitations:

The claimed security system comprising a mechanical key for mechanically opening and closing the lock of the locked subject is met by the mechanical key as seen in figure 2 for operating a vehicle door lock;

The claimed portable device having a wireless communication function and including a key retainer for retaining the mechanical key is met by the remote control for controlling the vehicle security system including door locks that has a receptor for retaining the mechanical key of the vehicle as seen in figure 2 (col10 1-32);

The claimed notifying means for notifying a driver whether the mechanical key is retained in the key retainer is met by the LEDs that show what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (col10 49-67).

However, Walter does not specifically disclose an activation controlling means for performing wireless communication between the locked subject and the portable device wherein the locked subject outputs a request signal during the wireless communication, the portable device outputs an ID code signal in response to the request signal, and the activation controlling means controls the activation of the lock in accordance with the ID code signal. Ruediger discloses *Safety Device* that teaches a wireless vehicle lock controlling device that outputs a challenge code to the wireless remote device that receives the challenge code and responds with a response code that identifies (ID code) the transponder as being valid for the vehicle and when the vehicle verifies this

response code the vehicle unlocks the door locks (abstract, col2 12-67 and col3 1-27). Adding electronic circuitry that allows the vehicle security system of Walter to use an additional means of unlocking the vehicle doors through a challenge-response method taught by Ruediger would make the device more user-friendly and allow the user to unlock the vehicle without having to press an unlock door button which would be beneficial if the user had his or her hands full and wouldn't be able to reach their keys Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Walter according to the teachings of Ruediger to include electronic circuitry that performs wireless communication between the locked subject and the portable device wherein the locked subject outputs a request signal during the wireless communication, the portable device outputs an ID code signal in response to the request signal, and the activation controlling means controls the activation of the lock in accordance with the ID code signal.

Regarding claim 2, Walter and Ruediger disclose all of the claimed limitations. The claimed key detector arranged in the portable device to detect whether the mechanical key is retained in the key retainer is met by the spring electrodes that sense whether the key is retained in the receptor (Walter: col11 29-44). The claimed portable device warning device arranged in the portable device to provide a warning is met by the LEDs lighting up to indicate what mode the vehicle is currently in (Walter: col10 49-67). The claimed portable device controller arranged in the portable device to control the portable device warning device to provide warning when the key detector detects

that the mechanical key is not retained in the key retainer is met by the remote control controlling the functioning of the LEDs that light up to indicate what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (Walter: col10 49-67).

Regarding claim 3, Walter and Ruediger disclose all of the claimed limitations. The claimed key detector arranged in the portable device to detect whether the mechanical key is retained in the key retainer is met by the spring electrodes that sense whether the key is retained in the receptor (Walter: col11 29-44). The claimed portable device controller arranged in the portable device for outputting a warning signal when the key detector detects that the mechanical key is not retained in the key retainer is met by the LEDs that light up to indicate what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (Walter: col10 49-67). The claimed locked subject warning device arranged in the locked subject to provide a warning is met by the mode indicators in the vehicle cabin that are illuminated when the vehicle is placed into valet mode by removing the key from the remote control receptor therefore displaying to the user that the key is not being retained in the receptor (Walter: col10 1-46). The claimed locked subject controller arranged in the locked subject for controlling the locked subject warning device to provide the warning when receiving the warning signal is met by the

security system receiving the signal from the remote control when the key is removed from the remote control receptor and setting the vehicle into valet mode which in turn provides indication on the mode indicators inside the vehicle that the vehicle is currently in valet mode and the key is removed from the remote control receptor (Walter: col10 1-67).

Regarding claim 4, Walter and Ruediger disclose all of the claimed limitations. The claimed portable device warning device arranged in the portable device to provide a warning is met by the LEDs that light up to indicate what mode the vehicle is currently in (Walter: col10 49-67). The claimed locked subject warning device arranged in the locked subject to provide a warning is met by the mode indicators in the vehicle cabin that are illuminated when the vehicle is placed into valet mode by removing the key from the remote control receptor therefore displaying to the user that the key is not being retained in the receptor (col10 1-46). The claimed key detector for detecting whether the mechanical key is retained in the key retainer is met by the spring electrodes that sense whether the key is retained in the receptor (Walter: col11 29-44). The claimed portable device controller for controlling the portable device warning device to provide the warning and send a warning signal to the locked subject when the key detector detects that the mechanical key is not retained in the key retainer is met by the remote control controlling the functioning of the LEDs that light up to indicate what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to

the user that the key is not being retained in the receptor (Walter: col10 49-67) and sending a signal to the vehicle to indicate that the key has been removed and to put the vehicle into a valet mode and therefore indicate on the mode indicators that the vehicle is in valet mode and the key is removed from the remote control receptor (Walter: col3 40-52 and col10 1-67). The claimed locked subject controller for controlling the locked subject warning device to provide the warning when receiving the warning signal is met by the security system receiving the signal from the remote control when the key is removed from the remote control receptor and setting the vehicle into valet mode which in turn provides indication on the mode indicators inside the vehicle that the vehicle is currently in valet mode and the key is removed from the remote control receptor (Walter: col10 1-67).

Regarding claim 6, Walter and Ruediger disclose all of the claimed limitations. The claimed security system wherein the locked subject is a vehicle including an electric device and an engine, and the security system disables at least one of activation of the electric device and starting of the engine when the mechanical key is not retained in the key retainer is met by the vehicle security system restricting access to certain components of the vehicle such as trunk locks and glove compartment locks when the vehicle is placed into valet mode by removing the key from the remote control receptor (Walter: abstract and col10 1-67).

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Luebke et al. (Luebke; US Patent 6,034,617).

Regarding claim 12, Walter discloses the following claimed limitations:

The claimed key retainer for retaining a mechanical key that mechanically opens and closes the lock is met by the remote control receptor that holds a mechanical key as seen in figure 2;

The claimed key detector for detecting whether the mechanical key is retained in the key retainer is met by the spring electrodes that sense whether the key is retained in the receptor (col11 29-44).

However, Walter does not specifically disclose the claimed portable device being operable for outputting an ID code signal for controlling the opening and closing of the lock. Luebke discloses *Operator Intent Based Passive Keyless Vehicle Control System* that teaches a conventional RKE portable device that transmits a unique identification code to the receiver in the vehicle to operate the vehicle door locks (col3 64-67 and col4 1-10). Using a unique identification code as the particular way to identify the signal sent by the remote control when wirelessly communicating with the vehicle would give the system more security by only allowing the vehicle door locks to be operated when the identification code is recognized to be one that is authorized by the receiver and prevent spurious radio signals from activating the door lock (Luebke: col1 22-25). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to

modify the device disclosed by Walter according to the teachings of Luebke to use a unique identification code signal for controlling opening and closing of the lock.

Regarding claim 13, Walter and Luebke disclose all of the claimed limitations. The claimed portable device wherein the locked subject is a vehicle including an electric device and an engine, and the security system disables at least one of activation of the electric device and starting of the engine when the mechanical key is not retained in the key retainer is met by the vehicle security system restricting access to certain components of the vehicle such as trunk locks and glove compartment locks when the vehicle is placed into valet mode by removing the key from the remote control receptor (Walter: abstract and col10 1-67).

Regarding claim 14, Walter and Luebke disclose all of the claimed limitations. The claimed portable device comprising a notifying means for notifying a driver whether the mechanical key is retained in the key retainer is met by the the LEDs that light up to indicate what mode the vehicle is currently in (normal, valet, etc...) and the car being automatically put into valet mode when the key is removed from the remote control receptor, therefore displaying to the user that the key is not being retained in the receptor (Walter: col10 49-67).

8. Claims 12 and 13 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (Johnson; US Patent Publication 2002/0067249) in view of Luebke.

Regarding claim 12, Johnson disclose *Key FOB With Valet And Car Locator Feature* that has the following claimed limitations:

The claimed key retainer for retaining a mechanical key that mechanically opens and closes the lock is met by the mechanical key being held in its key FOB by a retention feature, the mechanical key being used to mechanically open a door (paragraphs 5 and 6);

The claimed key detector for detecting whether the mechanical key is retained in the key retainer is met by the key FOB being provided with a sensor which senses when the key has been removed (paragraph 7).

However, Johnson does not specifically disclose the claimed portable device being operable for outputting the ID code signal for controlling opening and closing of the lock. Luebke teaches a conventional RKE portable device that transmits a unique identification code to the receiver in the vehicle to operate the vehicle door locks (col3 64-67 and col4 1-10). Using a unique identification code as the particular way to code the signal sent from the FOB of Johnson (paragraph 27) would give the system more security by only allowing the vehicle door locks to be operated when the identification code is recognized to be one that is authorized by the receiver and prevent spurious radio signals from activating the door lock (Luebke: col1 22-25). Therefore it would

have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Johnson according to the teachings of Luebke to use a unique identification code signal for controlling opening and closing of the lock.

Regarding claim 13, Johnson and Luebke disclose all of the claimed limitations. The claimed portable device wherein the locked subject is a vehicle including an electric device and an engine, and the security system disables at least one of activation of the electric device and starting of the engine when the mechanical key is not retained in the key retainer is met by the key FOB controlling the lock/unlock functions of the vehicle through an onboard controller and the onboard controller disabling certain features of the vehicle including trunk and glove compartment opening and limiting RPMs when the key has been removed from the key FOB (paragraphs 5-8). The examiner takes official notice that it is well known that locking mechanisms can be implemented including electronic circuitry, such as solenoids, and therefore one of ordinary skill in the art would have disabled the electronic device that unlocks the trunk and glove compartment in order to affect the onboard controller not allowing the trunk and glove compartment to be opened when the mechanical key is removed.

Allowable Subject Matter

9. Claims 7-11 are allowed.

10. Claims 5 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

With regards to independent claim 7, the prior art does not specifically disclose or suggest a security system for use with a locked subject having a lock that can be electronically activated comprising a manual activation controlling means including a first control for performing control of the wireless communication between the locked subject and the portable device and a second control for sending an ID code signal to the locked subject and activating the lock when the operation portion is operated with a disabling means for disabling at least one of the controls of the manual activation controlling means when the mechanical key is retained in the key retainer.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kendel, USP 5,220,319

Claar et al. USP 5,254,996

Suyama et al. USP 5,561,331

McConnell, USP 6,016,676

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH

Thomas J. Mullen, Jr.
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Art Unit 2632

5-2-05